

In re Application of Williamson et al.
Application No. 10/613,241

REMARKS

The Pending Claims

Claim 1 has been amended. Claims 1-14 currently are pending in the application.

Summary of the Office Action

The Office Action rejects claims 1-14 under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 4,897,989 (Gray) (hereinafter "the Gray '989 patent").

Discussion of the Section 103 Rejection

As noted above, the Office Action rejects claims 1-14 as allegedly obvious over the Gray '989 patent. Applicants respectfully traverse this rejection.

As acknowledged in the Office Action, the Gray '989 patent discloses a novel pile fabric and a method of making the same employing a three-ply yarn containing one textured yarn and two non-textured yarns (see, e.g., the Abstract of the Gray '989 patent). By way of contrast, the present application is directed to providing a pile fabric that addresses the various deficiencies of prior pile fabrics without the use of textured fibers or yarns (see, e.g., the present specification at paragraph [0004]), which can add complexity and additional expense to the manufacture of the fabric, as well as increased potential for the occurrence of single end defects and non-uniform dyeing. Accordingly, claim 1 provides that at least a portion of the tufts of the fabric consist essentially of groups of continuous filament non-textured fibers. Thus, as opposed to the pile fabric disclosed in the Gray '989 patent, at least some of the tufts of the fabric do not contain textured fibers.

The Office Action asserts that, in the context of the present claims, the meaning of the transition "consisting essentially of" is not clear from a reading of the specification or claims. However, Applicants note that the specification clearly indicates that an object of the present application is to provide a pile fabric that addresses the various deficiencies of prior pile fabrics without the use of textured fibers or yarns (see, e.g., the present specification at paragraph [0004]). Therefore, Applicants respectfully submit that the specification clearly identifies one of the basic and novel characteristics of the claimed invention (i.e., providing the specified degree of surface coverage without the use of textured fibers or yarns).

In re Application of Williamson et al.
Application No. 10/613,241

Also, while the pending claims utilize the transition "comprising" to indicate that the claimed fabric can contain structures other than those specifically enumerated, the claim language clearly provides that at least some of the tufts *consist essentially of* groups of continuous filament non-textured fibers. As noted above, the Gray '989 patent only teaches fabrics in which the pile fibers contain both non-textured fibers and textured fibers. Therefore, the fabrics disclosed in the Gray '989 patent cannot properly be considered to contain at least some tufts consisting essentially of groups of continuous filament non-textured fibers.

Furthermore, the Gray '989 patent teaches that the textured fibers are an essential component of the disclosed three-ply yarn. Therefore, one of ordinary skill in the art, having read the Gray '989 patent, would not have been motivated to modify the Gray '989 patent in such a way as to eliminate the textured fiber from the yarn used to form the pile fabric disclosed therein.

Moreover, the pending claims specify that the fibers contained in those tufts consisting essentially of groups of continuous filament non-textured fibers comprise a partially oriented thermoplastic polymer. By way of contrast, the fibers utilized in forming the pile of the fabric in the Gray '989 patent are either drawn or false-twist textured. In either case, the initial partially oriented yarn (i.e., DacronTM polyester yarn) is drawn to such a degree that the polymer molecules are fully oriented with respect to the longitudinal axis of the filament or fiber. For example, the untextured yarns are drawn at a ratio of about 1.7 (see, e.g., the Gray '989 patent at col. 1, line 45 – col. 2, line 10), which those of ordinary skill in the art understand results in full orientation of the polymer molecules within the crystalline segments of the filament or fiber. Furthermore, the textured yarn is made from a partially oriented yarn that has been false twist textured. As understood by those of ordinary skill in the art, the false twist texturing process entails the drawing of the yarn prior to or substantially simultaneous with the twisting and heat setting of the yarn in the texturing process. This drawing step of the texturing process would similarly increase the orientation of the polymer molecules in the filament or fiber resulting in a fully oriented filament or fiber. Therefore, while the Gray '989 patent discloses a yarn and fabric that is produced using a partially oriented yarn as a starting material, those of ordinary skill in the art understand that the yarn processing steps described in the Gray '989 patent increase the orientation of the polymer molecules and transform the partially oriented starting material into a fully oriented finished product.

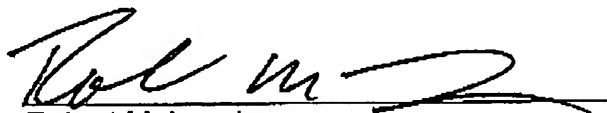
In re Application of Williamson et al.
Application No. 10/613,241

Accordingly, Applicants respectfully submit that the invention defined by the pending claims cannot properly be considered *prima facie* obvious over the Gray '989 patent. The Section 103 rejection over the Gray '989 patent, therefore, should be withdrawn.

Conclusion

In view of the foregoing, the application is considered in proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone interview would expedite prosecution of the instant application, the Examiner is invited to call the undersigned.

Respectfully submitted,



Robert M. Lanning
Reg. No. 57,121
MILLIKEN & COMPANY, M-495
P.O. Box 1926
Spartanburg, SC 29304
Telephone: (864) 503-1537
Facsimile: (864) 503-1999

Date: September 15, 2006